REMARKS

The Application has been carefully reviewed in light of the Office Action dated September 10, 2003 (Paper No. 17). Claims 1 to 5, 7 to 11 and 14 to 26 are pending in the application. Claims 1, 11, 14, 18 and 19 are the independent claims. Claims 1, 8, 9, 10, 11, 14, 18 and 19 are being amended, and Claims 25 and 26 are being added, herein. Reconsideration and further examination are respectfully requested.

The Applicant acknowledges the telephone interviews with Examiner Chang and Applicant's undersigned representative during the period of September 3 through 8, 2003. During the interviews, claim amendments suggested by the Examiner were discussed.

More particularly, the Examiner suggested amending the independent claims to include the feature that negotiation of the assignment of image processing functionality includes a cost function contemplating both image transfer time and image quality. Since the art applied in rejecting the claims of the present invention is not seen to disclose or to suggest the features of the claims, Applicant elected not to amend the independent claims in this manner, as is discussed in more detail below. In addition and with regard to the amendments suggested by the Examiner, Applicant respectfully refers the Examiner to Claim 4, which includes this feature. In addition, Applicant respectfully refers the Examiner to Claims 20 to 24, which concern a cost of transferring program code.

By the Office Action, Claims 1 to 5, 7 to 11 and 14 to 24 have been rejected under 35 U.S.C. § 103(a) over HP JetSend Communications Technology, Section I: Architectural Overview, Hewlett-Packard Company, 1997 (the "HP reference").

Based on the Examiner's indication, during the telephone interviews, that the features of Claim 4 are not taught by the HP reference, it is believed that Claim 4 is in condition for allowance. In addition, it is believed that the features of Claims 20 to 24 are not disclosed or suggested by the HP reference. Accordingly, Claims 20 to 24 are also believed to be patentable over the HP reference.

The remaining claims are also believed to be patentable over the HP reference.

The present invention involves negotiation between two devices, in which the devices negotiate an assignment of image processing functionality based on functionality of the first and second devices. Executable program code needed by one of the devices to implement functionality assigned to it during the negotiation is then transferred from the device that has the functionality to the device that is in need of the functionality. The transferred program code is executable to implement the needed functionality.

By virtue of the transfer of the program code implementing image processing functionality, a device is able to perform the functionality that it has been assigned to perform, and but for the transfer of the program code would not be able to perform.

Each of independent Claims 1, 11, 14, 18 and 19 have the features of negotiating an assignment of image processing functionality in accordance with functionality available in first and second devices, and transferring program code to an image processing device, the program code implementing functionality assigned to one of the devices, which is needed by the device to perform functionality assigned to it.

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It is indicated, commencing at page 5 of the Office Action, that the section entitled "Exchange Optimization", at page 1,lines 23 to 29 of the HP reference, discloses exchanging "information", which the Office Action states "would allow including [sic] functionality to export from one device to another." As support for this position, the Office Action refers to the statement, found at page 1 of the HP reference: [i]nter-operability - every device adds value to every other device," However and in seemingly direct contradiction of this position, the Office Action states that the HP reference fails to use the words "program code." (See page 3 of the Office Action.)

It is submitted that the position taken in the Office Action in rejecting the claims based on the cited portions of the HP reference, particularly in view of the concession made in the Office Action that the HP reference does not discuss program code, is both legally and technically incorrect.

It seems that the position taken in the Office Action depends on an interpretation of the word "information" which encompasses executable program code implementing image processing functionality. However, this interpretation is not seen to be supported by the description provided by the HP reference. As is understood from the description provided in the HP reference, the information that is exchanged from one device to the other identifies the type of data encoding(s) supported by each device, from which a data encoding is selected that each device is capable of supporting using its own device-specific code. An example of an interaction between two devices, and the information that is exchanged between the two devices, is provided in the HP reference commencing at page 12, in Section 2.4.5.

Referring to Figure 2-4, at page 13 of the HP reference, sending and

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receiving devices communicate to establish a session and to open channel(s) of communication. Thereafter, at the fourth block on the left side of Figure 2-4, the sending device sends a description of the job, which indicates that the job contains image data. In addition, the information communicated by the sender identifies the color space, pixel depth and resolution options supported by the sending device. The receiving device parses the received information, selects its preferred job options from among those options provided by the sending device, which are also supported by the receiving device, and the receiving device sends its selections (i.e., image encoding, color space, pixel depth, and resolution) to the sending device. The sending device verifies that the receiving device's preferences are among those supported by the sending device, as identified in its previous communication, and then sends the content. No program code is seen to be transferred between the sending and receiving devices.

The example provided by the HP reference is seen to describe an exchange between two devices such that one device identifies the encodings that it supports, from which the other selects those encodings that is supports. The information exchanged between the two devices is not seen to in anyway disclose the transfer of program code needed by one device to perform a negotiated assignment of image processing functionality.

In addition and as illustrated in the example, the negotiation results in the selection of encoding options that both devices are able to "consume". Nothing in the example even suggests the transfer of executable program code that implements image processing functionality needed by one of the devices. In fact and in the above example, the sending device makes a request of the receiving device to select from the encoding

options supported by the sending device, and the receiving device selects encoding options that it supports from those encoding options supported by the sending device and requests the sending device to forward content using the selected encoding.

Reference is further respectfully made to Section 2.4.4, commencing at page 11 of the HP reference, entitled "Device Code". It is stated therein that:

> "[a] device must be able to convert between the device specific information/data formats and the [electronic material] used by the JetSend protocols...."

In addition and at page 12, the HP reference further states that:

> "[e]ach device will have it's own preferences for data encodings, and thus will negotiate for different attributes and make different choices. They all use the JetSend protocols for negotiation, where the sender makes an offer, the receiver chooses its preferred encoding and makes a request, and the sender fulfils the request. The device code is the very device-specific implementation of the component that interacts between the JetSend protocols and the actions of the devices."

The HP reference continues and states that functionality is "left up to the device to implement", and that such functionality left up to the device to implement is the functionality that negotiates encoding type and the functionality that processes the data in the agreed-upon encoding. As is described, in the subsection entitled "E-material negotiation and consumption" at page 12 of the HP reference, each device is responsible to function to provide a list of encoding types that it supports and a preferential ordering. In addition, each device is responsible to be able to accept and process data encoded in one of

these encoding types.

The cited portions of the HP reference discussed above, as well as the remaining portions of the HP reference cited in the Office Action, are not understood to disclose negotiating between devices to assign image processing functionality to the devices in accordance with functionality available in the devices, and transferring from one device to the other device program code that implements functionality assigned to one of the devices and needed by the device to perform the functionality assigned to it.

Accordingly, the position adopted in the Office Action as to the scope of the word "information" as used in the HP reference is not seen to be supported by the description provided by the HP reference. That is, the HP reference is merely seen to describe a device transferring information identifying a type of encoding that it is able to support so that a compatible encoding can be selected, by which to encode the job data. In addition, the HP reference is seen to describe that each device is left to implement its own image processing functionality using device-specific code.

Accordingly and for at least these reasons, Claims 1, 11, 14, 18 and 19 are believed to be patentable over the HP reference.

New dependent Claim 25 has the added feature that prior to the transfer of the program code, the device to which the program code is transferred lacks the image processing functionality implemented by the program code. New dependent Claim 26 has the added feature that at the time of negotiating between the first and second device, the device to which the program code is transferred in the transferring step is unable to perform the image processing functionality implemented by the program code transferred in the transferring step. The HP reference is not seen to disclose or to even suggest the features

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of Claims 25 and 26. Accordingly, Claims 25 and 26 are believed to be patentable over the HP reference.

The remaining claims are each dependent from the independent claims discussed above and are therefore believed patentable for the same reasons. Because each dependent claim is also deemed to define an additional aspect of the invention, however, the individual consideration of each on its own merits is respectfully requested.

In view of the foregoing, the entire application is believed to be in condition for allowance, and such action is respectfully requested at the Examiner's earliest convenience.

Applicants' undersigned attorney may be reached in our Costa Mesa, California office at (714) 540-8700. All correspondence should continue to be directed to our below-listed address.

Respectfully submitted,

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